#### REMARKS

This Amendment and Response to Final Office Action is being submitted in response to the final Office Action mailed January 11, 2006. Claims 1-5, 7, and 9-21 are pending in the Application. Claims 1-5, 7, and 9-21 stand rejected.

Specifically, Claims 1, 5, 14, and 18 stand objected to under 37 CFR 1.75(c), as being of improper form for failing to further limit the subject matter of a previous claim limitation.

Claims 1-5, 7, 9, 10, 13, 14, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. (U.S. Patent No. 5,465,251) in view of Saleh et al. (U.S. Patent No. 6,801,496).

Claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. in view of "Official Notice".

Finally, Claims 15-17 and 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. as applied to Claims 14 and 18, and further in view of "Official Notice".

In response to these objections and rejections, Claims 1, 7, 10-14, and 18 have been amended to clarify the subject matter which Applicant regards as the invention. Additionally, Claims 2-5 have been canceled. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added. As a result of the amendments, and in view of the following remarks, Applicant submits that the Application is now in condition for allowance, without further search, and respectfully requests such action.

### Objection to Claims 1, 5, 14, and 18 Under 35 CFR 1.75(c):

Claims 1, 5, 14, and 18 stand objected to under 37 CFR 1.75(c), as being of improper form for failing to further limit the subject matter of a previous claim limitation.

Claims 1, 14, and 18 have each been amended to remove the redundant limitations cited by Examiner. Claim 5 has been canceled.

Therefore, Applicant submits that the objection to Claims 1, 5, 14, and 18 under 37 CFR 1.75(c) as being of improper form for failing to further limit the subject matter of a previous claim limitation has now been overcome and respectfully requests that this objection be withdrawn.

## Rejection of Claims 1-5, 7, 9, 10, 13, 14, and 18 Under 35 U.S.C. 103(a) - Judd et al. and Saleh et al.:

Claims 1-5, 7, 9, 10, 13, 14, and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. (US 5,465,251) in view of Saleh et al. (US 6,801,496).

Independent Claim 1 has been amended to recite:

An address protocol for forwarding a message packet from a source node to a destination node along a sequence of communicatively coupled nodes functioning as a linear chain network, the address protocol comprising:

a relative source address field programmed with an initial value at the source node corresponding to a destination node that is a preselected number of nodes away from the source node along the linear chain network;

# a relative destination address field containing a counter and a directional code corresponding to a port of the source node from which the message packet is to be sent along the linear chain network;

wherein the counter is incremented by a preselected step in value at each node the message packet is forwarded to along the chain network until the counter reaches the initial value, thereby indicating that the destination node has been reached;

### an identifier field containing an identifier to identify the message packet as having a relative address protocol; and

wherein the destination node does not require address information in addition to the counter reaching the initial value to accept the message packet.

Similar amendments have been made to independent Claims 14 and 18. These amendments are fully supported in the Specification, Drawings, and Claims of the Application and no new matter has been added.

Neither Judd et al. nor Saleh et al. disclose, teach, or suggest the limitations of the amendments.

The present invention discloses a message packet in which there is a relative destination address field and a relative source address field. The relative destination address field, originally included in one or more dependent claims, includes a counter for counting the number of nodes that the message packet has encountered, or hopped, from the source node and a directional code corresponding to the port from which the message packet is sent to along the chain. The relative source address field includes an initial value of the preselected number of node hops since this information provides a destination node with a relative return address back to the source node. The relative destination address field is now included in independent Claims 1, 14, and 18.

Neither Judd et al. nor Saleh et al. disclose, teach, or suggest the use of both a relative destination address field and a relative source address field. Additionally, Neither Judd et al. nor Saleh et al. disclose, teach, or suggest a directional code corresponding to the port from which the message packet is sent to along the chain, or the combination of such with the counter for counting the number of nodes that the message packet has encountered.

Although Judd et al. disclose a one-to-six byte, always present address field (Col. 6, lines 18-19 and Figure 6A), and although the disclosed address field is used to route the frame (Col. 6, lines 19-20), Judd et al. do not disclose the use of both a relative destination address field and a relative source address field, as does the present invention.

The limitation "an identifier field containing an identifier to identify the message packet as having a relative address protocol" was previously contained in one or more dependent claims. The identifier field is now included in independent Claims 1, 14, and 18.

Although Judd et al. disclose an always-present, one-byte control field (Col. 6, lines 14-15), this control field merely indicates a frame type and a sequence number. A frame type specifies a standard that defines the physical structure of the packet. The identifier field of the present invention specifically provides identification that the message packet is using the relative address protocol.

Thus, Applicant submits that amended independent Claims 1, 14, and 18 now recite elements/limitations not disclosed, taught, or suggested by Judd et al. or Saleh et al. Therefore, Applicant submits that the rejection of independent Claims 1, 5, 14, and 18, as well as dependent Claims 2-4, 7, 9, 10, and 13, under 35 U.S.C. 103(a) as being unpatentable over Judd et al. in view of Saleh et al. has now been overcome and respectfully requests that this rejection be withdrawn.

## Rejection of Claim 12 Under 35 U.S.C. 103(a) - Judd et al., Saleh et al., and "Official Notice":

Claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. in view of "Official Notice".

The above arguments apply with equal force to dependent Claim 12. Therefore, Applicant submits that the rejection of Claim 12 under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. in view of "Official Notice" has now been overcome and respectfully requests that this rejection be withdrawn.

## Rejection of Claims 15-17 and 19-21 Under 35 U.S.C. 103(a) - Judd et al., Saleh et al., and "Official Notice":

Claims 15-17 and 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. as applied to Claims 14 and 18, and further in view of "Official Notice".

The above arguments apply with equal force to dependent Claims 15-17 and 19-21. Therefore, Applicant submits that the rejection of Claims 15-17 and 19-21 under 35 U.S.C. 103(a) as being unpatentable over Judd et al. and Saleh et al. as applied to Claims 14 and 18, and further in view of "Official Notice", has now been overcome and respectfully requests that this rejection be withdrawn.

### CONCLUSION

Applicant would like to thank Examiner for the attention and consideration accorded the present Application. Should Examiner determine that any further action is necessary to place the Application in condition for allowance, Examiner is encouraged to contact undersigned Counsel at the telephone number, facsimile number, address, or email address provided below. It is not believed that any fees for additional claims, extensions of time, or the like are required beyond those that may otherwise be indicated in the documents accompanying this paper. However, if such additional fees are required, Examiner is encouraged to notify undersigned Counsel at Examiner's earliest convenience.

Respectfully submitted,

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